

Table 1 and 2 provide the cumulative storage volumes for the HydroStor HS31 chamber and end cap. These tables can be used to calculate the stage-storage volumes for the retention or detention systems. Contact your local Prinsco Representative for more information regarding the stage storage volumes.

**Table 1 – HS31 Incremental Storage Volume per Chamber**

Depth of water in the System in. (mm)	Cumulative Single Chamber Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative Storage for System ft <sup>3</sup> (m <sup>3</sup> )	Depth of water in the System in. (mm)	Cumulative Single Chamber Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative Storage for System ft <sup>3</sup> (m <sup>3</sup> )
28 (711)	↑ 15.14 (0.43)	29.56 (0.84)	14 (356)	10.19 (0.29)	16.36 (0.46)
27 (686)	↑ 15.14 (0.43)	28.83 (0.82)	13 (330)	9.05 (0.26)	14.94 (0.42)
26 (660)	Stone 15.14 (0.43)	28.1 (0.8)	12 (305)	7.86 (0.22)	13.49 (0.38)
25 (635)	Cover 15.14 (0.43)	27.37 (0.78)	11 (279)	6.63 (0.19)	12.02 (0.34)
24 (610)	↓ 15.14 (0.43)	26.64 (0.75)	10 (254)	5.37 (0.15)	10.53 (0.3)
23 (584)	↓ 15.14 (0.43)	25.91 (0.73)	9 (229)	4.07 (0.12)	9.02 (0.26)
22 (559)	15.14 (0.43)	25.18 (0.71)	8 (203)	2.74 (0.08)	7.49 (0.21)
21 (533)	15.09 (0.43)	24.42 (0.69)	7 (178)	1.38 (0.04)	5.94 (0.17)
20 (508)	14.89 (0.42)	23.57 (0.67)	6 (152)	↑ 0 (0)	4.38 (0.12)
19 (483)	14.55 (0.41)	22.63 (0.64)	5 (127)	↑ 0 (0)	3.65 (0.1)
18 (457)	13.94 (0.39)	21.53 (0.61)	4 (102)	Stone 0 (0)	2.92 (0.08)
17 (432)	13.16 (0.37)	20.33 (0.58)	3 (76)	Foundation 0 (0)	2.19 (0.06)
16 (406)	12.26 (0.35)	19.06 (0.54)	2 (51)	↓ 0 (0)	1.46 (0.04)
15 (381)	11.26 (0.32)	17.73 (0.5)	1 (25)	↓ 0 (0)	0.73 (0.02)

Note: Calculations assume 6" (150 mm) of stone above chambers, 6" stone for foundation, 3" (75 mm) of stone between chambers and 40% stone porosity. Add 0.73 ft<sup>3</sup> (0.02 m<sup>3</sup>) for each additional inch of stone foundation or cover.



**Table 2 – HS31 Incremental Storage Volume per End Cap**

Depth of water in the System in. (mm)	Cumulative Single End Cap Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative Storage for System ft <sup>3</sup> ( m <sup>3</sup> )	Depth of water in the System in. (mm)	Cumulative Single End Cap Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative Storage for System ft <sup>3</sup> (m <sup>3</sup> )
28 (711)	↑ 0.62 (0.02)	4.89 (0.14)	14 (356)	0.43 (0.01)	2.52 (0.07)
27 (686)	↑ 0.62 (0.02)	4.73 (0.13)	13 (330)	0.39 (0.01)	2.33 (0.07)
26 (660)	Stone 0.62 (0.02)	4.57 (0.13)	12 (305)	0.34 (0.01)	2.14 (0.06)
25 (635)	Cover 0.62 (0.02)	4.41 (0.12)	11 (279)	0.29 (0.01)	1.95 (0.06)
24 (610)	↓ 0.62 (0.02)	4.25 (0.12)	10 (254)	0.24 (0.01)	1.76 (0.05)
23 (584)	↓ 0.62 (0.02)	4.09 (0.12)	9 (229)	0.18 (0.01)	1.56 (0.04)
22 (559)	0.62 (0.02)	3.93 (0.11)	8 (203)	0.12 (0)	1.36 (0.04)
21 (533)	0.62 (0.02)	3.77 (0.11)	7 (178)	0.06 (0)	1.16 (0.03)
20 (508)	0.61 (0.02)	3.6 (0.1)	6 (152)	↑ 0 (0)	0.96 (0.03)
19 (483)	0.59 (0.02)	3.43 (0.1)	5 (127)	↑ 0 (0)	0.8 (0.02)
18 (457)	0.57 (0.02)	3.26 (0.09)	4 (102)	Stone 0 (0)	0.64 (0.02)
17 (432)	0.54 (0.02)	3.08 (0.09)	3 (76)	Foundation 0 (0)	0.48 (0.01)
16 (406)	0.51 (0.01)	2.9 (0.08)	2 (51)	↓ 0 (0)	0.32 (0.01)
15 (381)	0.47 (0.01)	2.71 (0.08)	1 (25)	↓ 0 (0)	0.16 (0)

*Note: Calculations assume 6" (150 mm) of stone above chambers, 6" stone for foundation, 3" (75 mm) of stone between chambers and 40% stone porosity. Add 0.16 ft<sup>3</sup> (0.005 m<sup>3</sup>) for each additional inch of stone foundation or cover.*